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## Federal-State Joint Board on Universal Service

CC Docket No.  
96-45

**COMMENTS OF THE AMERICAN FOUNDATION FOR THE BLIND ON THE NOTICE  
OF PROPOSED RULEMAKING REGARDING FEDERAL-STATE JOINT BOARD ON  
UNIVERSAL SERVICE**

The American Foundation for the Blind is pleased to have this opportunity to respond to the March 8 Federal Register Notice of Proposed Rulemaking and Order establishing a Federal State Joint Board on Universal Service (CC Docket No. 96-45; FCC 96-93).

## I. Introduction

We look forward to the opportunity to assist the Commission in addressing these design issues as it works to implement Sections 251, 255, 256, and 713 of the Telecommunications Act. However accessible design is not in itself sufficient to ensure that Americans with disabilities will have an

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equal opportunity to participate in our society. Information technology must also be available and affordable.

## II. Goals and Principles of Universal Service Support Mechanisms

In paragraphs (5) and (6), comments are requested regarding policies to foster access to advanced telecommunications and information services for "all regions of the Nation", and access by consumers in "rural, insular, and high-cost areas" and "low income consumers" to "telecommunications and information services" that are "reasonably comparable to those services provided in urban areas." Subsequently, the Notice states in paragraph (8), "We invite interested parties to propose additional principles relevant to the choice of services that should receive universal service support."

We are also responding to paragraph (4). We are responding to this paragraph following our response to the above captioned paragraphs because the concept of affordability should follow the outline of the services needed.

**RESPONSE:** The specific needs and interests of individuals with disabilities clearly fit within the principles embodied in Section 254 of the Act and these paragraphs (5),(6), and (8) of the Notice. Accordingly, we urge the Joint Board and the Commission to establish a priority within the universal service support mechanism for the provision of advanced telecommunications equipment and services to individuals with disabilities who would otherwise not be able to participate fully in the emerging information-based society.

**JUSTIFICATION:** For millions of persons with disabilities telecommunication services (including advanced information services) are not a luxury or mere alternative to existing services; they are a necessity. Individuals with disabilities, particularly those who cannot read print because of a visual impairment or other disabling condition, face numerous, nearly insurmountable barriers in obtaining information and in expressing their views. Telecommunications networks and services may be the only way to obtain access to much of the information and many of the services commonly available to the vast majority of individuals who are not disabled. For example, millions of Americans who have visual impairments cannot independently read standard printed material such as a newspaper or a government notice. Architectural barriers and the inadequacy of public transportation prevent people who are blind from independently and conveniently purchasing food, clothing, and other items.

However, with accessible information technology, communications networks (such as the Internet) and an accessible user interface, people who are blind or visually impaired can, for the first time, independently and conveniently read government documents (including this Notice), electronic books, newspapers, restaurant lists, compare products and make purchases, and even exchange letters with sighted peers. This new telecommunications technology can create enormous opportunities for people with disabilities in pursuing employment, education, and alternative methods for handling health care and personal assistance needs. Individuals with disabilities are therefore much more dependent on the deployment of telecommunications and advanced information services.

In paragraph 4, the Commission seeks comment on whether there are appropriate measures that could help us assess whether "affordable" service is being provided to all Americans.

**RESPONSE:** We suggest two measures that could help assess whether affordable service is being provided to people with disabilities: first, the additional cost to connect to the equipment

and service; and second, measurement of the cost related to the ability of the individual to gain access to all the features of the equipment and service.

**JUSTIFICATION:** For people who are blind, indeed for all persons with disabilities, universal service means not just access to the equipment and service but the ability to pay for and fully utilize all of its features. For example, people who are blind or severely visually impaired often pay full market price to subscribe to telecommunications services or to purchase telecommunications equipment that they may be only partially able to use because of barriers present in the design of the service or product.

In addition, a majority of severely visually impaired persons have one or more additional impairments that relate to their ability to use this equipment. Special tabulations prepared by the U.S. National Center for Health Statistics based on the regularly conducted Health Interview Surveys show that of the 1,391,000 severely visually impaired persons, about 59% were multiply impaired. Visual plus musculoskeletal impairments account for most of the combinations. This number is only slightly larger than the visual plus other sensory and/or speech impairments. Put more simply, there is a significant number of persons who can't see the dial pad of a plain old telephone and may not be able to hear audio feedback or manipulate any of the controls.

Consider also that a significant number of individuals with severe visual impairments are classified as being at or close to the federally defined poverty threshold. Poverty is most prevalent among those with severe visual limitations in the 15-64 year age group (33% compared to 13% of those with no disability). Without accessibility features, even the "cheapest" phone is not usable.

We note that the Telecommunications Act of 1996 Section 254 (b)(3) calls for consumers in rural, insular, and high-cost areas and low income consumers to have access to telecommunications and information services that are reasonably comparable to those services provided in urban areas. This notice states in the goals and principles (14) "that the Act specifically provides that telecommunications services--not just the narrow category of telephone exchange service--be affordable. Therefore, measures of affordability must include the cost of accessing not just the "plain old telephone" but also the reasonably comparable range of services contemplated in the Act. In addition, the measure of affordability must also include the costs, often an on-line cost, to not simply access the service but to utilize all of the features comparable to those provided in other areas.

For example, persons who are deaf and blind must spend \$3,000 or more for a specialized Braille telecommunications device. And those with a vision disability must spend from \$1,000-\$5,000 to purchase special screen access technology in order to use a computer (that is assuming the on-screen material is text based which is increasingly not the case in electronic information services and information kiosks).

In fact, the array of telecommunications services that are now being offered as part of basic services are beginning to include access to the Internet and home security--services that often require special adaptation to ensure full utilization. Section 255 of the Act will go far to ensure that such services and equipment are accessible to and usable by individuals with disabilities. However, Section 255 does not address the issue of affordability in the sense addressed in this notice. Therefore we urge the Commission to include a measurement of these services in the concept of affordability.

In paragraph (9) the Notice asks for comment on the interpretation of Section 254 (c)(1) as allowing the Joint Board and Commission to include services that do not necessarily meet all the four criteria. Comments are also sought on how to evaluate whether a service or feature is essential to education, public health, or public safety.

**RESPONSE:** We agree with the Commission's interpretation that the definition of services to be supported need not meet all of the four criteria. With respect to evaluation of whether a service is essential to education, public health, or public safety we propose that the Joint Board and Commission keep in mind that the Section 254 (c) definition recognizes that such definition will evolve as the competitive market deploys new services and will need to be periodically reviewed. Second, we recommend that this review process take into consideration that people who are blind or visually impaired, along with other people with disabilities are a subset of the population with distinct needs for access to these services.

**JUSTIFICATION:** We recommend a flexible approach to criteria selection because we are very concerned that if the filter proposed in (B) "have through the operation of market choices by consumers been subscribed to by a substantial majority of residential customers" is consistently applied, individuals who are blind or visually impaired, who may need access to telecommunications services and advanced information services, may not be eligible to benefit from support from a universal service mechanism. These individuals, along with other persons with disabilities will never be a substantial majority of residential customers. However, as residential customers, they may need to access information systems for education, public health, or public safety that are not desired by a "substantial majority of residential customers." Alternatively, these services may be in the small group of services to which the readily achievable defense of Section 255 has been successfully applied.

### III. Support for Rural, Insular, and High-Cost Areas for Low-Income Consumers

#### A. Goals and Principles

#### What Services to Support

Paragraph (16) of the Notice mentions fairly common local exchange telephone services: voice grade access to the public switched network, with the ability to place and receive calls; touch-tone; single party service; access to emergency services (911); and access to operator services. Comments are sought in subsequent paragraphs.

**RESPONSE:** We believe that each of the specified services meets the definition of universal services. Additionally, each of these services are critical to the independence and participation of people who are blind or visually impaired in or society. We want to specifically address three of the listed services: touch-tone (paragraph 19); access to emergency services (911) (paragraph 21); and access to operator services (paragraph 22).

**JUSTIFICATION:** Many establishments, including government agencies and service-providing organizations, are now incorporating touch-tone responsive telephone answering systems to allow users to choose from a menu of services and expedite connections to a particular party. In addition, people who are blind or visually impaired in an increasing number of communities can access an audio version of the daily newspaper over the telephone (using touch-tones to navigate through articles and sections). We believe that deploying this service universally throughout the public switched network is negligible in terms of cost, but critical for access to basic services.

Enhanced 911 services are essential to individuals who are blind. Automatic number and automatic location information are essential for the safety of individuals who are blind and who need to report emergency situations. These individuals, like everyone else, are not always in their homes or a familiar neighborhood when they are confronted with an emergency situation.

Similarly people who are blind or visually impaired (or who have other difficulties in reading print) regularly use operator services to access the system for public health or public safety reasons. They also must use the system on a routine basis for directory assistance. And, as public health, safety, and emergency systems are deployed in graphics-based, kiosk-type systems in public places, reliable access operator services (human assistance) becomes even more urgent. This is because these systems (Section 255 of the Telecommunications Act notwithstanding) will often be deployed without features to ensure access for users who cannot read the print on the kiosk screen.

In paragraph (23) the Commission asks commentators to discuss advanced services that may warrant inclusion in the list of services that are supported by universal service support mechanisms.

**RESPONSE:** We strongly support the inclusion of access to directory listings, communications networks (especially the Internet) and data transmission capability in the definition of universal service.

Access to communications networks for data transmission should be a priority for individuals with disabilities even if such advanced services are not subscribed to by a substantial majority of residential customers. In addition, the universal service support mechanisms (either federal or state) should include assistance to individuals with disabilities to defray some or all of the added cost they must incur for the procurement or specialized equipment to access advanced telecommunications services (similar to the way many states now assist in the distribution of telecommunications devices for the deaf). As the provisions of Section 255 of the Act take hold and new equipment is designed to be accessible to people with disabilities these universal service distribution mechanisms could help to provide market support to manufacturers who choose to make their equipment accessible.

**JUSTIFICATION:** Traditionally directory listings have been included in local telephone books and many telephone companies allow individuals who are blind free access to 411 directory service. This policy should be made explicit since a blind person is unable to independently consult the telephone book. As directory listings move to an electronic environment, it will be essential to mandate that the interface to and structure of the information be accessible to people with visual or other disabilities.

Access to the Internet is available from most, if not all, urban areas. Cable TV lines pass by a substantial majority of American households. And, ISDN is being rapidly deployed. As we stated earlier, telecommunications technology is often the only means by which individuals with disabilities have an equal opportunity to access information and obtain services commonly available to the vast majority of individuals who are not disabled. While access to the Internet and similar advanced telecommunications services may be seen as a luxury for non-disabled individuals (an assertion with which we do not agree), they are most definitely a necessity for people with visual or other disabilities.

For many individuals with disabilities, plain old telephone service alone, or even advanced touch-tone access telephone service, is not a sufficient or meaningful definition of universal service.

Competition and technological development have already resulted in a dynamic mix of telecommunications services and products far beyond voice-grade telephony. Enshrining analog, voice-grade telephony as a measure of universal service will leave a great many people without access to the important communication tools they will need to extricate themselves from dependency and isolation.

In paragraph (67) the Commission asks that interested parties identify specific sources of information relevant to this list of services in accordance with the criteria set forth in section 254(c)(1), including information sources available at State commissions and procedures for obtaining such information.

**RESPONSE:** The following organizations collect information on marketplace decisions relating to so-called "marketplace" decisions of consumers:

Electronic Industries Association  
Marketing Services Department  
2001 Pennsylvania Ave.  
Washington, D.C. 20006

Collects information on number of households with television, radio, audio systems cellular telephones, etc.

Neilsen Media Research  
299 Park Avenue  
New York, N.Y. 10171

Collects similar information as well as basic cable, and pay cable

Louis Harris & Assoc.  
111 Fifth Avenue  
New York, N.Y. 10003

Survey of number of adults accessing the World Wide Web

Roper Starch Worldwide, Inc.  
566 East Boston Road  
Mamaroneck N.Y. 10017

Periodic surveys of computers and computer related items such as modems, printers, and CD-ROM.

BenLo Park Research (<http://mall.turnpike.net/~jc/>)

Collects statistics on which web browsers people use

The NPD Group Inc.  
900 West Shore Road  
Port Washington, N.Y. 11050

Collects information from a representative household panel on ownership of cellular phone, telephone answering machine, fax, tv satellite dish, basic and pay cable, computer, modem.

Graphics, Visualization & Usability Center  
College of Computing  
Georgia Institute of Technology  
Atlanta, GA 30332  
E-mail: [www-survey@cc.gatech.edu](mailto:www-survey@cc.gatech.edu)

Conducts a period survey of world wide web browsers asking various questions on demographics including disabilities and yearly income.

D. Ensuring That Supported Services for Rural Insular, and High-Cost and Low-Income Consumers Evolve.

In paragraph (68) the Notice refers to the Commission's preference to encourage existing technical standards bodies to establish relevant standards.

**RESPONSE:** While we understand the Commission's reticence to set technical standards, we do believe that the commission must act to assist, and where necessary, require standards-setting entities to ensure access for people with disabilities to telecommunications devices and services and inter-operability for the specialized equipment that such individuals may need to connect to communications networks. Such standards can ensure that telecommunications equipment and network services will be inter-operable and readily accessible to and usable by people with disabilities who may need access from home, school, or a library obtain services.

**JUSTIFICATION:** The information technology industry has failed to ensure access for individuals with disabilities. For example, people who are blind or visually impaired are already suffering the loss of opportunity to access communication services due to the lack of technological inter-operability and accessible interfaces for telecommunications technology and services. Graphical user interface prevents individuals who are blind from using public access information systems or some of the more popular electronic information networks such as America On Line. Individuals who are blind lose their jobs when their employers adopt Windows or similar graphical user interface based information systems. Without technical standards to ensure access to information sources, persons with disabilities are cut out, cut off, or forced to become "electronically disadvantaged" in relation to their non-disabled peers in trying to access or maintain employment, education, housing, or other services, or even to enjoy entertainment that others take for granted. Section 255 of the Telecommunications Act will help alleviate this inequity, but the Commission must oversee industry standard-setting to ensure that accessibility for individuals with disabilities to all communications services is a priority.

V. Goals and Principles

In paragraph (71), Schools, Libraries, and Health Care Providers. The Commission seeks comments on designation of additional, special services for universal service support for eligible schools, libraries, and health care providers.

**RESPONSE:** With respect to eligible schools and libraries, we urge the Commission to designate additional services for support that would allow these entities to extend the so-called "wire" to the classrooms and libraries so that blind and severely visually impaired students can, along with their sighted peers, have access to resources that are available through the Internet and other information services.

**JUSTIFICATION:** A database of materials in accessible format for people who are blind or visually impaired has been created including the holdings of agencies such as the American

Printing House for the Blind, Recording for the Blind and Dyslexic, and the National Library Service for the Blind and Physically Handicapped and other private agencies. This database allows, among other things, a classroom student who is blind to research much in the same way as a sighted peer using the school or public library. However, at the present time few school libraries are even wired to any of the information services. This is especially true in rural areas.

Respectfully Submitted,

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The comments of the American Foundation for the Blind are endorsed by the following organizations:

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Association for the Education and Rehabilitation of the Blind and Visually Impaired  
National Industries for the Blind